REVIEWS

Review: The Social Organization of Sexuality: Sexual Practices in the United States

Edward O. Laumann, John H. Gagnon, Robert T. Michael, Stuart Michaels. Chicago, Ill: The University of Chicago Press; 1994. 718 pages.

Sexual Attitudes and Lifestyles

Anne M. Johnson, Jane Wadsworth, Kaye Wellings, Julia Field. Oxford, England: Blackwell Scientific Publications; 1994. 499 pages.

The publication of The Social Organization of Sexuality: Sexual Practices in the United States may have raised more questions than it has answered. From the beginning, this sex survey—titled the National Health and Social Life Survey has been dogged by controversy. The first source of controversy had to do with the federal government's role in funding sexuality studies of the US population. Initiated in 1988 as a contract to the University of Chicago and the National Opinion Research Center (NORC) to design a survey of adult sexual behavior (with support from the National Institute of Child Health and Human Development [NICHD]), the project quickly attracted the attention of congressional conservatives. Despite successive modifications of the questionnaire and very intensive efforts by National Institutes of Health officials to persuade Congress of the scientific and public health importance of the survey, congressional language was used to prohibit the further release of government funds for this project. The assistance of a national advisory board of prominent scientists and the support of a variety of US Public Health Service agency heads and officials were insufficient to persuade the Office of Management and Budget to allow the project to proceed under federal sponsorship. Fortunately, a consortium of major foundations came through with support, enabling the team to go into the field in 1992. However, a major problem was that the survey's sample was reduced from its originally intended size of 10 000-20 000 to only 3432.

While the most obvious impetus of the survey, and the one of most interest to public health, was the use of its findings for sexually transmitted disease intervention and education, the survey's roots are in other scientific traditions. Despite 40 years of attempts at comprehensive studies of sexuality, there had been no national survey of adult sexual behavior. Most studies of sexuality, especially of what would now be called high-risk behavior, used limited nonprobability samples. No matter how insightful these were, they could provide neither national estimates of behavior nor clear guidelines for intervention. Thus The Social Organization of Sexuality is a landmark study in the sexual behavior field.

A second impetus for the study was the longstanding tradition of fertilityrelated research in the Public Health Service, primarily at the National Center for Health Statistics and the NICHD. Lack of knowledge about sexuality has limited our ability to understand demographic phenomena such as adolescent pregnancy, household and family formation, divorce, and contraceptive use. The introduction of sexuality into demography reflects a broadening theoretical perspective. Phenomena such as fertility are seen in the context of other aspects of human behavior and social life and not as mere observations.

A third impetus for the project was the increasing threat of acquired immunodeficiency syndrome (AIDS) and the surge in other sexually transmitted diseases during the 1980s. It quickly became clear that certain forms and parameters of sexual behavior (such as anal intercourse and high numbers of partners) placed individuals-particularly gay and bisexual men and their female partners-at high risk of infectious disease. Without accurate estimates of the population prevalence of homosexuality and bisexuality, of patterns of partner selection, and of the association of sex with behaviors such as alcohol and drug use, it was difficult to forecast accurately the spread of the epidemic and hence the likely numbers of new human immunodeficiency virus (HIV) or other infections. The extent to which those infections might be contained within certain social networks or migrate beyond them was equally difficult to estimate. In the absence of such understanding, agencies should not have been expected to design realistic and efficient intervention campaigns. In particular, all three traditions—sexuality, fertility and family and household formation, and public health—had often in the past ignored the fact that sexual and demographic behavior occurs in the context of social networks, the area of expertise of *The Social Organization of Sexuality's* first author, Edward O. Laumann.

The Social Organization of Sexuality is organized into four parts: an orientation to the study's theoretical framework and design; a series of chapters on sexual preferences and experiences, including number of partners, sexual networks, homosexuality, and forced sex; a section on sexual happiness and dysfunction, sexually transmitted diseases, and fertility, cohabitation, and marriage; and extensive technical appendices that include the text of the questionnaire. Findings with implications for the public health community are found in every section, but those that have received widespread attention include the prevalence of monogamy and of same-gender sexual activity. Not surprisingly, married people were far less likely than the never- or once-married to have had more than one partner during the previous 12 months (93.7% of married persons had had only one sexual partner in the last year, compared with 38% of those never married and not cohabiting). About 79% of married individuals had had only one partner in the past 5 years, and married people were much more likely than singles to report being extremely or very happy. These data about monogamy help explain another of the book's key findings: the lack of overlap between sexual networks. A high prevalence of enduring monogamous partnerships and segregated networks must obviously curb the sexual transmission of infection.

The report's analysis of the prevalence of homosexuality distinguishes between age-specific homosexual behavior, desire, and identity. About 9.1% of men and 4.3% of women reported engaging in any same-sex activity since puberty. For nearly half of these men (about 4% of the total sample), this behavior occurred only before the age of 18. By contrast, only

about 1.4% of the women and 2.8% of the men reported a homosexual *identity*.

These results are relatively similar to the data from the population-based survey of sexual behavior in the United Kingdom, Sexual Attitudes and Lifestyles. The British study reported rates of samegender sexual experience that ranged up to 6.1% for men and 3.4% for women. By contrast, the Kinsey study, 1,2 which used convenience rather than random samples, found a much higher prevalence of homosexuality.

Both the US and British studies found regional differences in the prevalence of same-gender sexual behavior. In the United States, homosexual behavior appeared to be far more common in the 12 largest cities; in the United Kingdom, male homosexual contact appeared to be two to three times as prevalent in London as elsewhere, especially for recent, rather than lifetime, exposure. In Britain, regional differences in the prevalence of homosexual orientation were far more striking for men than for women. These regional differences occur because of the selective migration of individuals with same-gender sexual identity into more accepting environments and because of social environmental effects on individuals in urban settings. Opportunities for same-gender sexual behavior are greater and sanctions are fewer in big cities than in smaller places.

The British and US surveys were also similar in their sampling techniques and in their reliance on face-to-face interviews with self-administered questionnaires. But the sample size of the former (18876 residents of Great Britain aged 16 to 59 years) was considerably larger than that of the latter, and the British response rate of 64.7% was smaller than the US study's 78.6%. And the books differ very much in style. The British book, written by a team of epidemiologists and public health specialists, has almost none of the theoretical language of the US study with its use of concepts such as master status, sexual script, and network and economic choice theory. Thus the British book is a much more straightforward, less conjectural description of sexual and fertility-related practices. The readability of the British survey-both visually and stylisticallymakes it very accessible to public health and lay audiences.

The Social Organization of Sexuality (but not Sexual Attitudes and Lifestyles) has recently become the cynosure of a debate on the accuracy of responses to the survey, on the survey's validity as science, and on whether in fact the social sciences are science at all (survey authors Laumann and Gagnon are sociologists, Michael an economist, and Michaels a survey methodologist). An editorial in The Economist titled "74.6% of Sociology is Bunk"³ charged that insecurity about professional identity drove the Chicago team to a quantitative analysis. In a New England Journal of Medicine review of the popular version of the survey,4 the reviewer complained of tendentiousness and overinterpretation.⁵ A review by Harvard University biologist R. C. Lewontin is the most extensive.6 Lewontin attacks the survey methodology on which the US survey is based, including the use of a population probability sample and the validity of self-reports of sexual behavior. But Laumann et al., like the British team, went to great lengths to test both the internal and the external validity of their findings.

Lewontin is more on target with his theoretical objections to The Social Organization of Sexuality. The problem is this: Most of the behavioral findings are analyzed and reported according to a set of what Laumann et al. refer to as master statuses. These are fundamental demographic characteristics about which it is quite easy to gather data: gender, race/ ethnicity, age, education, marital status, and religious affiliation. Lewontin's concern is that relying on these variables and inflating them by attempting to read into them undue theoretical importance misses where the real touchstones might be for public health. For example, a household sample survey necessarily ignores those institutionalized populations-prisoner, soldier, homeless person, college student-whose master statuses and living situations place them at particular risk of sexually transmitted disease. (The sampling frame of the British survey also excluded some elements of the institutionalized population such as the homeless but included unspecified others.) Thus the very strength of the US survey from the point of view of social science is also its weakness, particularly from the point of view of public health. This leads to the question of to what extent the book's reiteration (despite the initial fears of conservatives) of the strong relationship between traditional heterosexual marriage, personal happiness, religiosity, and monogamy is a product of the way the sample was constructed, the survey methodology, the response rate, and the way that questions were framed and analytic categories employed. Has the US study given us the best possible data and the most accurate picture of the population?

The absence in the US survey of any discussion of the real-life conditions under which people engage in sexual behavior is also striking: Are there children around? How old are the children? Is the household crowded? What are the respondents' sleep and vacation patterns? Attention to the context of daily life in which sexual behavior occurs, beyond the use of alcohol and drugs, might have made the data more interpretable. Additionally, despite its underpinnings in network analysis, the US study does not provide the comprehensive network-based approach found in many smaller studies of sexual and drug use behavior. More significant, given the stated public health goals of the study, is the survey's omission of a physician, a biologist, or an epidemiologist from the research team. Many of the speculative, theoretical explanations in the book would have been better grounded with data about biological and medical factors that might affect sexuality, such as hormone use (including use of oral and topical medications), menstrual cycles and discomforts, nursing, pregnancy and postpartum conditions, and prostate problems; such information is quite limited in the book.

The goals of the British survey were much more overtly related to public health. In fact, the authors state, "The research instrument was designed to provide data which would assist health care professionals working in many areas of sexual health: psychosexual counselling, the prevention of STD and family planning"; the authors also hoped to stimulate further social inquiry into this area of human behavior. The public health–related data they present seem more accessible than that of the US volume, perhaps because there is much less social science theory.

Some of the questions raised by the British and US sexual behavior surveys are still to be answered: Is it possible to obtain reliable data about sexual behavior, preferences, and identification? From whom will the data be most and least accurate? What kind of survey techniques are most likely to provide truthful data? Can policymakers be better educated about the public health importance of understanding sexual behavior? And finally, what admixture of public health and social science is most likely to produce

data useful to advancing our understanding of this most fundamental of social relationships?

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References

- Kinsey AC, Pomeroy WB, Martin CE. Sexual Behavior in the Human Male. Philadelphia, Pa: Saunders; 1948.
- Kinsey SC, Pomeroy WB, Martin CE, Gebhard PH. Sexual Behavior in the Human Female. Philadelphia, Pa: Saunders; 1953.
- 3. 74.6% of sociology is bunk. *The Economist*. May 13, 1995:15. Editorial.
- Michael RT, Gagnon JH, Laumann EO, Kolata G, eds. Sex in America: A Definitive Survey. Boston, Mass: Little, Brown; 1994.
- Money J. Sex in America: a definitive survey. N Engl J Med. 1995;332:1452–1453.
- Lewontin RC. Sex, lies and social science. NY Rev Books. April 20, 1995; XLII (7):24– 29. [Letters May 25, 1995; June 8, 1995.]

Review: Sexual Behavior and AIDS

Alfred Spira, Nathalie Bajos, and the ACSF Group. Aldershot, England: Ashgate Publishing Company; 1994.

From the onset of the acquired immunodeficiency syndrome (AIDS) epidemic, public health efforts have suffered from a paucity of information on one of the major forces of the epidemic, sexual behavior. In the 1980s, both developed and developing countries fielded major surveys to map the patterns of sexual behavior and to answer analytical questions about the causes and consequences of AIDS. At the same time, there was a tremendous need to apply that knowledge to prevent and control the AIDS epidemic.

Sexual Behavior and AIDS represents the effort of the French to understand sexuality and sexual behavior in their country, with the aim of developing effective strategies for preventing AIDS and sexually transmitted diseases, as well as of generating models to predict the spread of the AIDS epidemic. The volume presents the initial results of the Analysis of Sexual Behavior in France (ACSF), a telephone survey of 20 055 respondents that was conducted in 1991 and 1992 under the aegis of the French government's National AIDS Research Agency and with full support of French public funds (in sharp contrast to the major sexual behavior surveys in the United States1 and the United Kingdom²). A few restrictions that sought to ensure the anonymity of the respondents were placed upon the survey; however, the project moved forward with only relatively minor delays.

The National Institute of Health and Medical Research, which had scientific responsibility for the survey, assembled a multidisciplinary team that brought together expertise in sociology, demography, epidemiology, social psychology, psychology, and psychoanalysis. To study sexual behavior, the team took a life course perspective that ventured to understand the meaning that people attach to sexuality, particularly in the context of health. The study design called for a random sample of over 20 000 adults, aged 18 to 69, who were asked in a telephone interview approximately 30 questions of a general nature. These included items on marital status and living arrangements, occupation, nationality, and a few questions on risk taking, such as seat belt use and helmet use on motor bikes. Data on HIV risk indicators were also collected. An additional, longer questionnaire was then administered to individuals who fell into traditional AIDS risk categories—those with a history of multiple partners, same-gender sex, sex with prostitutes, drug use, or hemophilia-and to a control group of people born on the 4th, 17th, or 20th of any month. This approach resulted in a sample of 4820 completed long questionnaires containing a rich set of data, with information on communication regarding sexuality, attitudes toward sexual risk taking, partner characteristics, detailed accounts of the last sexual episode with the two most recent sexual partners, sexual fantasies. masturbation, sexual violence, and other sexual and nonsexual topics. Both questionnaires are reproduced in the book.

The time before embarking on a survey of this type is always filled with some trepidation. Although the history of recent surveys repeatedly has shown that people will respond to questions about sexual behavior, there are, nonetheless, frequent concerns about the effect of media coverage or organized oppositional campaigns on the response rate or even on the survival of the survey. Although the ACSF experienced those concerns, the data collection went smoothly. Seventytwo percent of the eligible households contacted produced a completed short questionnaire. Of those selected for the long questionnaire, 91.5% completed the interview, with a nearly identical dropout rate for men and women. Among those who dropped out, the most common reason given (31%) was the length of the questionnaire.

Relative to other surveys, the ACSF sample somewhat underrepresented inhabitants of larger cities and towns, especially Paris, and low-income households. Because these factors are related to the topic of study, the data were weighted to adjust for sample underrepresentation.

In their analyses, the authors of Sexual Behavior and AIDS present a snapshot of the sexual behaviors—over a lifetime and during the 12 months prior to the survey—of the French population. They examined, in addition, sociological and psychological factors related to sexual behavior and risk taking, among them, communication with others concerning emotional and sexual matters, norms related to the prevention of AIDS, and individuals' perceptions of their own risks and their thoughts and feelings about AIDS and death.

In depicting a relatively monogamous society, the results from the French survey are remarkably similar to those from the US reported in The Social Organization of Sexuality: Sexual Practices in the United States. 1 Data showed that 6.7% of the married or cohabiting male population had multiple partners in the 12 months prior to the survey. This figure increased to 26.1% of those who did not regard themselves as part of a couple. Corresponding data for women showed 2.8% of those who were married or cohabiting had multiple partners in the previous 12 months, as did 10.2% of those not part of a couple.

Sexual Behavior and AIDS reports lifetime rates of same-gender sexual contact of 4.1% and 2.6%, respectively, for men and women. A survey of sexual behavior conducted in France in 1972³ found similar results: 5% for men and 2% for women. The ACSF, however, measured lower rates for those under the age of 30; the authors of the study were unable to determine whether the difference was a result of reporting error or changes in behavior on the part of the younger cohorts. These rates of samegender contact also are lower than those found in the recent US¹ and UK² surveys.

The number of partners and samegender sexual contact have generated intense interest in the popular press and are important for monitoring the AIDS epidemic. Sexual Behavior and AIDS, however, offers additional analyses of sexual behaviors. The existence of the earlier French survey³ permitted comparisons across time of some behaviors.